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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,897	05/20/1999	ANAND RAMAKRISHNA	111399.01	8450
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MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052-6399			EXAMINER NGUYEN, MAIKHANH	
			ART UNIT 2176	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

09/316,897

Applicant(s)

RAMAKRISHNA, ANAND

Examiner

Maikhanh Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-25, 27-39 and 41-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-25, 27-39, and 41-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

1. This action is responsive to Amendment filed 04/30/2007 to the original application filed 05/20/1999.

Claims 1-8, 10-25, 27-39, and 41-47 are presented for examination. Claims 17, and 30 have been amended. Claims 1, 17, and 30 are independent claims.

### **Claim Rejections - 35 USC § 101**

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8, 10-25, 27-39, and 41-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### **As to claim 1:**

Under a broadest reasonable interpretation, the method claim 1 is unpatentable under section 101 because (i) it does not qualify as a “process” under section 101, as that term has been interpreted by case law, (ii) it seeks to patent an abstract idea, and (iii) the “useful, concrete, and tangible result” test does not apply here, but the claim

nevertheless does not meet that test. The method claim 1 differs from traditional process claims in several respects. For example, the claim does not recite any particular way of implementing the steps, nor does it require any machine or apparatus to perform the steps. In addition, the claim does not recite any electrical, chemical, or mechanical acts or results, which are typical in traditional process claims. Finally, the claim does not call for any physical transformation of an article to a different state or thing. While claim 1 does perform a transformation of data by “*instantiating... associating...*”, it does not require any machine or apparatus to perform the steps. Because the claim is completely untethered from any sort of structure or physical step, it is directed to a disembodied concept. In other words, the claim is nothing but a disembodied abstract idea until it is instantiated in some physical way so as to be limited to a practical application of the idea. For example, claim 1 does not specify whether the entity performing the steps of *instantiating and associating* is a computer, a human, or something else. Accordingly, the claim is so broad that it is directed to the abstract idea itself, rather than a practical implementation of the concept.

**As to claim 17:**

Under a broadest reasonable interpretation, the method claim 17 is unpatentable under section 101 because (i) it does not qualify as a “process” under section 101, as that term has been interpreted by case law, (ii) it seeks to patent an abstract idea, and (iii) the “useful, concrete, and tangible result” test does not apply here, but the claim nevertheless does not meet that test. The method claim 1 differs from traditional process claims in

several respects. For example, the claim does not recite any particular way of implementing the steps, nor does it require any machine or apparatus to perform the steps. In addition, the claim does not recite any electrical, chemical, or mechanical acts or results, which are typical in traditional process claims. Finally, the claim does not call for any physical transformation of an article to a different state or thing. While claim 17 does perform a transformation of data by “*inserting ... attaching ...*”, it does not require any machine or apparatus to perform the steps. Because the claim is completely untethered from any sort of structure or physical step, it is directed to a disembodied concept. In other words, the claim is nothing but a disembodied abstract idea until it is instantiated in some physical way so as to be limited to a practical application of the idea. For example, claim 17 does not specify whether the entity performing the steps of *inserting and attaching* is a computer, a human, or something else. Accordingly, the claim is so broad that it is directed to the abstract idea itself, rather than a practical implementation of the concept.

**As to claim 30:**

Claim 30 recites a computer system, which is interpreted as a computer program.

However, the claim fails to assert the program recorded on a computer-readable storage medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer without a computer-readable medium needed to realize the computer program's functionality, it is regarded as

nonstatutory functional descriptive material.

Dependent claims 2-16, 18-29 and 31-47 are rejected for fully incorporating the deficiencies of their base claims.

### **Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-19, 21-25, 27, 29-39, and 41-47 are rejected under 35 U.S.C. 102(b) as being anticipated by **Microsoft Corporation**, “*Dynamic HTML: The Next Generation of User Interface Design Using HTML*,” February 1997, pp. 1-7.

#### **As to claim 17:**

Microsoft teaches a computer-implemented method of providing dynamic effects to an HTML document (*e.g., Dynamic HTML adds richer, more engaging user interfaces to the HTML presentation language; see page 1*), comprising the steps of:

- encapsulating code in an external component that may affect a behavior of one or more elements contained in the document while being external to the document,

including elements of different documents (e.g., *The object model provided by Dynamic HTML give Web developers the ability to dynamic update the content, style and structure of the Web-based content, while providing them with detailed control over the appearance, interactivity and multimedia elements; see Introduction to Dynamic HTML section; page 1 / Dynamic HTML extends HTML with an object model allowing scripts or programs to change styles and attributes of page elements ... to replace existing elements with new ones ... extensibility needed for creating business applications; see 1<sup>st</sup> ¶, page 2*);

- inserting an element into the document (e.g., *dynamic change the style and attributes of elements, as well as insert, delete or modify elements ... reformatting the document; see Appendix section, page 4*);
- attaching a reference in the document to associate the element with an instance of the external component, such that another instance of the element may be referenced by a different document wherein the reference associating the element with the external component is maintained in a cascading style sheet (e.g., *In HTML, styles and specified as element attributes or via Cascading Style Sheets. The object model exposed by Dynamic HTML exposes every HTML element in the document, including its attributes and CSS properties; see 1<sup>st</sup> ¶, page 5*) and wherein code is not included in the document (e.g., *Dynamic HTML pages ... incorporating Java Applets or ActiveX<sup>TM</sup> Controls in Web pages; see 1<sup>st</sup> ¶, page 4*); and

- providing the document to a render, wherein the render is capable of instantiating the external component, associating an interface of the instance of the external component with the element, and displayed the rendered document (*e.g., Dynamic HTML ... integrated directly into browser's page display; see 3<sup>rd</sup> ¶, page 2*).

**As to claim 18:**

Microsoft teaches providing the external component to the renderer (*see Introduction to Dynamic HTML section; page 1*).

**As to claim 19:**

Microsoft teaches rendering a page image from the document (*e.g., place elements such as images ... on the page; see Positioning section; page 5*, accessing the external component (*e.g., an object model can be accessed ... within a page; see Appendix section, page 4*), and modifying a representation of the element based on the code in the external component (*e.g., dynamic change the style and content of a page, even after if has been loaded ... recalculation to render a page only if sections of that page change; see 2<sup>nd</sup> full ¶, page 5*).

**As to claim 21:**

Microsoft teaches the changing the appearance thereof (*e.g., change the size, color or other font properties of elements ... by enlarging the font and change its color when the user move the mouse over the title; see page 5*).



**As to claim 22:**

Microsoft teaches the changing the location thereof (*e.g., placing objects in different z-planes... manipulating object coordinates; see Positioning section; page 5*).

**As to claim 23:**

Microsoft teaches rendering a page image from the document, accessing the external component, and drawing information in the image based on the code in the external component (*e.g., a script can scan the elements of a page and, using dynamic content, insert a table of contents...dynamic HTML includes animation and multimedia controls that can be used to apply visual effects to elements on a page...dynamic HTML incorporates several features to integrate data with native HTML elements; see pages 5-6*).

**As to claim 24:**

Microsoft teaches rendering a page image from the document is interleaved with drawing information in the image (*dynamic HTML includes animation and multimedia controls that can be used to apply visual effects to elements on a page...dynamic HTML incorporates several features to integrate data with native HTML elements; see pages 6*).

**As to claim 25:**

Microsoft teaches receiving an event indicative of user interaction with the image (*e.g., Dynamic form...can response to user input...when users conduct a typical Internet search...obtaining additional information requires clicking...the Web page, page 2*).

**As to claim 27:**

Microsoft teaches the information associating the element with the external component is maintained in a custom tag (*e.g., dynamic behavior to their pages 'such as writing custom embedded objects in Java, Visual Basic' ... objects now can be done with scripts; see 2<sup>nd</sup> - 3<sup>rd</sup> ¶, page 2*).

**As to claim 29:**

Microsoft teaches the reference associating the element with the external component is maintained inline with the element in the document (*e.g., the object model exposed by Dynamic HTML exposes every HTML element in the document, including its attributes and CSS properties ... dynamic read and change the values of these attributes and CSS properties; see 1<sup>st</sup> ¶, page 5*).

**As to claim 1:**

The rejection of claim 17 above is incorporated herein in full. Additionally, Microsoft teaches:

- rendering a page image corresponding to at least part of the document, the page image including a representation of the element (*e.g., the HTML presentation language ... providing them with detailed control over the appearance, interactivity and multimedia elements; see Introduction to Dynamic HTML section; page 1*); and
- accessing the external component for determining a behavior of the representation of the element rendered on the page image (*e.g., dynamic change the style and attributes of elements ... updates the display of the page reflect these changes ... other are exposed via an object that can be accessed ... Javascript object model ... the choice of scripting languages; see Appendix section, page 4*).

**As to claim 2:**

Microsoft teaches receiving an event, and wherein accessing the external component is performed in response to the event (*e.g., Dynamic HTML changes that by making it possible to create more interactive document that responds instantly to user action; see Interactive documents section, page 2*).

**As to claims 3-5:**

Refer to the discussions of claims 21-23 above, respectively, for rejections.

**As to claim 6:**

Microsoft teaches the external component comprises an object, and wherein accessing the external component includes instantiating an instance of the object (*e.g., dynamic*

*behavior to their pages 'such as writing custom embedded objects in Java, Visual Basic'  
... objects now can be done with scripts; see 2<sup>nd</sup> - 3<sup>rd</sup> ¶, page 2).*

**As to claim 7:**

Microsoft teaches receiving a new document having another element thereon, the new document including information associating the other element with the external component, rendering a new page image corresponding to at least part of the document, the new page image including a representation of the other element, and accessing the external component for determining a behavior of the representation of the other element rendered on the page image [*e.g., dynamic HTML extends HTML...replace existing elements (or objects) with new ones... adds the interactivity...adding dynamic behavior...adding making it compatible with current browsers and existing HTML pages; see page 2].*

**As to claims 10-12:**

Refer to the discussions of claims 27-29 above, respectively, for rejections.

**As to claim 13:**

Microsoft teaches the document includes another element having a representation thereof rendered in the page image, the document includes other information associating the other element with the external component and further comprising, accessing the external component for determining a behavior of the representation of the other element [*e.g.,*

*dynamic HTML extends HTML...change styles and attributes of page elements (or objects)...replace existing elements (or objects) with new ones... adds the interactivity...adding dynamic behavior...adding making it compatible with current browsers and existing HTML pages; see page 2].*

**As to claim 14:**

Microsoft teaches the document includes information associating the element with a second external component, and further comprising, accessing the second external component for determining a behavior of the representation of the element [*e.g., dynamic HTML extends HTML...change styles and attributes of page elements (or objects)...replace existing elements (or objects) with new ones... adds the interactivity...adding dynamic behavior...adding making it compatible with current browsers and existing HTML pages; see page 2].*

**As to claim 15:**

Microsoft teaches resolving a conflict between the behavior determined by the external component and the behavior determined by the second external component [*e.g., dynamic HTML extends HTML...change styles and attributes of page elements (or objects)...replace existing elements (or objects) with new ones... adds the interactivity... adding dynamic behavior; see page 2].*

**As to claim 16:**

Microsoft teaches downloading the external component (*e.g., Dynamic HTML ... has been loaded; see page 5*).

**As to claim 30:**

The rejection of claim 17 above is incorporated herein in full. Additionally, Microsoft teaches modifying the behavior of elements, including elements of different documents (*e.g., HTML content can modify itself on the fly in response to user actions, dynamic altering the appearance or content of the Web page; see More snap section; page 3*).

**As to claim 31:**

Refer to the discussion of claim 25 above for rejection.

**As to claim 32:**

Microsoft teaches the renderer displays a representation of the element and modifies a behavior of the element by accessing the external component (*e.g., renderer a page only if sections of that page change, including reformatting text paragraphs as needed ... Dynamic HTML adjusts the other related items, including renumbering them where appropriate; see 2<sup>nd</sup> full ¶, page 5*).

**As to claims 33-35:**

Refer to the discussions of claims 21-23 above, respectively, for rejections.

**As to claim 36:**

Microsoft teaches the renderer calls the external component a plurality of times to draw information on the page image, and the renderer draws information on the page image between at least some of calls to the external component (*e.g., a script can scan the elements of a page and, using dynamic content, insert a table of contents...dynamic HTML includes animation and multimedia controls that can be used to apply visual effects to elements on a page...dynamic HTML incorporates several features to integrate data with native HTML elements; see pages 5-6*).

**As to claim 37:**

Refer to the discussion of claim 6 above for rejection.

**As to claim 38:**

Microsoft teaches the external component comprises an object, and wherein the rendered communicates with the object (*e.g., The object model provided by Dynamic HTML give Web developers the ability to dynamic update the content, style and structure of the Web-based content, while providing them with detailed control over the appearance,*

*interactivity and multimedia elements; see Introduction to Dynamic HTML section; page 1).*

**As to claim 39:**

Microsoft teaches the render receives a new document having another element thereon that references the external component (*e.g., Dynamic HTML extends HTML with an object model allowing scripts or programs to change styles and attributes of page elements ... to replace existing elements with new ones ... extensibility needed for creating business applications; see 1<sup>st</sup> ¶, page 2).*

**As to claim 41:**

Microsoft teaches the cascading style sheet is embedded in the document (*e.g., Dynamic HTML extends ... Cascading Style Sheet; see page 2).*

**As to claim 42:**

Microsoft teaches the cascading style sheet is linked to the document (*e.g., Dynamic HTML extends ... Cascading Style Sheet; see page 2).*

**As to claims 43 and 44-46:**

Refer to the discussions of claims 27 and 12-14 above, respectively, for rejections.



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**As to claim 47:**

Microsoft teaches the renderer accesses the external component to control the format of data input by a user (*e.g., the object model exposed by Dynamic HTML exposes every HTML element in the document ...hide an element ... text of a bullet could be hidden until the user moves the mouse over the bullet; see page 5*).

**Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

Claims 8, 20, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**Microsoft** in view of **Wang et al.**, “*Customization of Distributed Systems Using COM*”, July- Sept.1998, Vol.6, pp.8-12.

**As to claim 8:**

Microsoft accessing the external component for determining a behavior of the presentation of other element includes accessing another instance of the object, however, *does not specifically teach the use of COM object.*

Wang teaches the use of COM object (*e.g., COM; see page 1*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Microsoft with Wang because it would have provided the capability for extending the benefits of object-oriented programming, such as encapsulation, polymorphism, and software reuse to a dynamic and cross-processing setting.

**As to claim 20:**

Wang teaches the external component is a COM object, and wherein accessing the external component including call an interface of the COM object (*see pp. 1-2*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Microsoft with Wang because it would have provided the capability for extending the benefits of object-oriented programming, such as encapsulation, polymorphism, and software reuse to a dynamic and cross-processing setting.

**As to claim 28:**

Wang teaches the information associating the element with the external component is maintained in a class identifier (*see pp. 1-2*).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Microsoft with Wang because it would have provided the capability for extending the benefits of object-oriented programming, such as encapsulation, polymorphism, and software reuse to a dynamic and cross-processing setting.

### **Response to Arguments**

5. Applicant's arguments filed 04/30/2007 have been fully considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

6. The prior art made of record, listed on PTO 892 provided to Applicant is considered to have relevancy to the claimed invention. Applicant should review each identified reference carefully before responding to this office action to properly advance the case in light of the prior art.

### **Contact information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-

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4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for patents

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MN

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